#2 cont'd

manufacturing a wire electrode. Since the α phase with superior workability surrounds the β phase with difficult workability, a wire electrode as shown in Fig. 8 can be easily formed as a fine wire without any cracks or breaks during a cold wire drawing process.

Replace the paragraph beginning at page 2, line 6 with:

#3

Further, a similar wire electrode for a wire electrical discharge machine is disclosed in Japanese Unexamined Patent Publication No. 300136/1997. Fig. 9 shows concentration of Zn in the radial direction of this wire electrode. The region near the surface of the wire electrode consists of the α phase and the Zn concentration is approximately 30 wt. %. In the case where Zn concentration exceeds 40 wt. %, there appears the β or γ phase having a different crystal structure from that of the α phase. At a depth of 5 to 30 μm from the surface of the wire electrode, the Zn concentration ranges from 35 to 45 wt. % where the α and β phases coexist and the Cu-Zn intermetallic compound with relatively high Zn concentration is formed.

Replace the paragraph beginning at page 3, line 3 with:

#4

The present invention is made to solve the described problems and an object thereof is to increase Zn concentration in the coating layer and to improve the machining speed. A further object of the present invention is to remove object material efficiently and improve the machining speed and accuracy of machining, by improving the rigidity of the wire electrode and suppressing vibration during discharge machining.

Replace the paragraph beginning at page 4, line 4 with:

Fig. 4 is a graph showing a relationship between the thickness of a coating of Cu-Zn alloy in the α phase and machining speed;

#5

[Replace the paragraph beginning at page 4, line 7 with:]

Fig. 5 is a graph showing a relationship between the thickness of a coating of Cu-Zn intermetallic compound in other than the α phase and machining speed;